

In the Claims:

Please cancel claims 7-12, without prejudice, and amend claims 13, 15 and 17.

The status of the claims is as follows:

1-12. (Cancelled)

13. (Currently Amended) A signal processing method utilizing a partial response to record information on a medium and then regenerate the information from the medium, comprising:

subjecting a record signal recorded on the medium to a convolution of (1-D) before a detecting process,

subjecting a regeneration signal from the medium to an equalizing process including the convolution of

(k-s·D)

where D: one (1) bit delay operator,and

k, s: positive integer,-k ≠ s. and

k ≥ 3, s ≥ 2.

14. (Previously Presented) The signal processing method according to claim 13, wherein the information is decoded from the equalized regeneration signal by use of maximum-likelihood detection.

15. (Currently Amended) A signal processing circuit utilizing a partial response to record and regenerate information on a medium comprising:

- a signal recording regenerating system including,
- a recording system subjecting a record signal recorded on the medium to the convolution of (1-D) before a detecting process; and
- a regenerating system subjecting a regeneration signal from the medium to an equalizing process including the convolution of

(k-s·D)

where D: one (1) bit delay operator, and

k, s: positive integer,  $k \neq s$ , and

$k \geq 3$ ,  $s \geq 2$ ,

16. (Previously Presented) The signal processing circuit according to claim 15, wherein the information is decoded from the equalized signal by use of maximum-likelihood detection.

17. (Currently Amended) a signal recording/regenerating apparatus utilizing a partial response to record and regenerate information on a medium comprising:

a recording system subjecting a record signal recorded on the medium to the convolution of (1-D) before a detecting process; and

a regenerating system subjecting a regeneration signal from the medium to an equalizing process including the convolution of

$$(k \cdot s \cdot D)$$

where D: one (1) bit delay operator, and

k, s: positive integer, ~~-k ≠ s~~, and

$k \geq 3$ ,  $s \geq 2$ .

18. (Previously Presented) The signal recording/regenerating apparatus according to claim 17, wherein the information is decoded from the equalized signal by use of maximum-likelihood detection.